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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,932	02/23/2004	Young Un Bang	8733.078.20-US	7678
30827	7590	11/17/2005	EXAMINER	
MCKENNA LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006			CHANG, YEAN HSI	
			ART UNIT	PAPER NUMBER
			2835	

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H13

<b>Office Action Summary</b>	<b>Application No.</b> 10/782,932	<b>Applicant(s)</b> BANG, YOUNG UN	
	<b>Examiner</b> Yean-Hsi Chang	<b>Art Unit</b> 2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-28 and 31-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 and 31-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/109,884.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/14/05 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 11, 21-24 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herron et al. (US 5,196,993) in view of Lewis et al. (US 5,422,751) and Esterberg et al. (US 5,566,048).

Herron teaches a liquid crystal display apparatus (14, fig. 3) comprising: a liquid crystal display module (72) for displaying picture data, an enclosure (70) loaded with the

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liquid crystal display module for surrounding the side surface and the rear surface of the liquid crystal display module (figs. 6 and 7), and a case (68) secured to the enclosure and the liquid crystal display module (fig. 3), said case being made from Aluminum (see col. 5, lines 1-4) to protect the periphery of a display area (fig. 3) in the liquid crystal display module (claims 1, 11, 21-22 and 24); and wherein said case is electrically connected to a frame (76) of the liquid crystal display module (element 78 being considered as part of the frame) (claims 2, 23 and 37).

Herron fails to teach the LCD module having a metal frame and a hinge having a rotation axis and a hinge arm extending from the rotation axis to the enclosure and being positioned between the liquid crystal display module and the enclosure.

Lewis teaches a LCD apparatus (50, fig. 5) comprising a LCD module (66) having a metal frame (69) for purposes of thinner, lighter and more rigid. Esterberg teaches a liquid crystal display apparatus (fig. 1) comprising: a hinge (18, fig. 4) having a rotation axis (20) and a hinge arm (38) extending from the rotation axis to an enclosure (14) and being positioned between the liquid crystal display module (not labeled) and the enclosure, wherein the liquid crystal display module the hinge arm and the enclosure are commonly secured thereto (see figs. 1 and 5-6, and col. 3, line 61 through col. 4, line 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Herron with the LCD module taught by Lewis for purposes of thinner, lighter and more rigid, and the hinge taught by Esterberg for a substantially zero torque applied to the display in a wide range of positions.

4. Claims 3-7, 15-16, 20, 28-32, 36 and 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herron et al. in view of Lewis et al and Esterberg et al.

Herron teaches a portable information processing apparatus (10, fig. 1) comprising: a main body (12) having an interfacing device (140), a display apparatus (14) mechanically coupled to the main body (fig. 1) for displaying picture data received from the main body, said display apparatus having a liquid crystal display module (14) for displaying picture data, an enclosure (70) loaded with the liquid crystal display module for surrounding the side surface and the rear surface of the liquid crystal display module (figs. 6 and 7), and a case (68) secured to the enclosure and the liquid crystal display module (fig. 3), said front case being made from aluminum (see col. 5, lines 1-4) to protect the periphery of a display area in the liquid crystal display module (claims 3, 5, 15, 20, 28 and 32); and wherein said case is electrically connected to a frame (76) of the liquid crystal display module (element 78 being considered as part of the frame) (claims 4, 31, 36 and 38-39); a hinge (104) coupled to the main body, wherein the display apparatus is mechanically coupled to the main body through the hinge (fig. 3) (claims 5-6, 16 and 29); and wherein the liquid crystal display module, the hinge arm, and the enclosure are commonly secure (see fig. 16) (claims 7 and 30).

Herron fails to teach the LCD module having a metal frame and a hinge having a rotation axis and a hinge arm extending from the rotation axis to the enclosure and being positioned between the liquid crystal display module and the enclosure.

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Lewis teaches a LCD apparatus (50, fig. 5) comprising a LCD module (66) having a metal frame (69) for purposes of thinner, lighter and more rigid. Esterberg teaches a liquid crystal display apparatus (fig. 1) comprising: a hinge (18, fig. 4) having a rotation axis (20) and a hinge arm (38) extending from the rotation axis to an enclosure (14) and being positioned between the liquid crystal display module (not labeled) and the enclosure, wherein the liquid crystal display module the hinge arm and the enclosure are commonly secured thereto (see figs. 1 and 5-6, and col. 3, line 61 through col. 4, line 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Herron with the LCD module taught by Lewis for purposes of thinner, lighter and more rigid, and the hinge taught by Esterberg for a substantially zero torque applied to the display in a wide range of positions.

5. Claims 8-10, 12-14, 17-19, 25-27 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herron et al. in view of Lewis et al and Esterberg et al.

Herron in view of Lewis discloses the claimed invention except indicating the case having a thickness of about 0.5-0.7 mm, or less than about 1.2 mm, or about 0.5 mm. It would have been an obvious matter to one having ordinary skill in the art at the time the invention was made to select a thickness of the case either of about 0.5-0.7 mm, less than 1.2 mm, or about 0.5 mm, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as

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being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1, 3, 21 and 28 have been considered but are moot in view of the new ground(s) of rejection.

### ***Correspondence***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yean-Hsi Chang whose telephone number is (571) 272-2038. The examiner can normally be reached on 07:30 - 16:00, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the Art Unit phone number is (571) 272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system,

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see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8558.

Yean-Hsi Chang  
Primary Examiner  
Art Unit: 2835  
November 14, 2005



YEAN-HSI CHANG  
PRIMARY EXAMINER